

REMARKS

Summary of Office Action

A three-month extension of time to respond to the June 5, 2006 Office Action is hereby respectfully requested. The Director is hereby authorized to charge \$510.00 in payment of the three-month extension-of-time fee to Deposit Account No. 06-1075 (order no.: 099999.0099). A duplicate copy of this paper is enclosed.

Claims 1-76 have previously been canceled. Claims 77, 84, 93, and 118 have been amended to more clearly define the invention and correct informalities. Claims 78-83, 85-92, and 94-117, 119, and 120 are also currently pending in the above-identified patent application. No new subject matter has been added as a result of the amendments to the claims.

Claims 77 and 84 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Claims 84-91, 102, and 106-120 have been allowed.

Claims 77-79, 81-83, and 92 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Rhee et al. U.S. Patent 6,017,658 (hereinafter "Rhee").

Claim 80 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Rhee in view of Eisenberger U.S. Patent 4,028,547 (hereinafter "Eisenberger").

Claims 93, 98, and 104 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Rhee in view of Greschner et al. U.S. Patent 4,393,127 (hereinafter "Greschner").

Claims 94 and 95 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Rhee in view of Greschner as applied to claim 77, and further in view of Hori et al. U.S. Patent 5,188,706 (hereinafter "Hori").

Claims 96 and 97 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Rhee in view of Greschner as

applied to claim 77, and further in view of Celler et al. U.S. Patent 5,051,326 (hereinafter "Celler").

Claims 99-101, 103, and 105 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Rhee in view of Greschner as applied to claim 77, and further in view of Murooka et al. U.S. Patent 5,166,962 (hereinafter "Murooka").

Reconsideration and allowance of this application in light of the following remarks is hereby respectfully requested.

The Rejections Based on 35 U.S.C. § 112

The Examiner rejected claims 77 and 84 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Although applicant respectfully disagrees, in order to advance the prosecution of this application, applicant has amended each of claims 77 and 84 to remove the limitation "wherein the exposure cells have a thickness less than about 50 microns."

Thus, for at least the above reasons, the rejection of each of applicant's amended independent claims 77 and 84 under 35 U.S.C. § 112, first paragraph, is moot. Applicant respectfully requests, therefore, that the rejection under 35 U.S.C. § 112, first paragraph, of claims 77 and 84 be withdrawn.

The Allowed Claims

Applicant notes with appreciation the indication of allowable subject matter in claim 84, as amended, and claims 85-91, 102, and 106-120, as previously presented.

The Rejections Based on 35 U.S.C. § 102

The Examiner rejected claims 77-79, 81-83, and 92 under 35 U.S.C. § 102(b) as being anticipated by Rhee.

Applicant's amended independent claim 77 defines a method of maskless lithographic pattern generation that includes using an array of exposure cells, "wherein a plurality of the exposure cells expose separate areas of a surface to be exposed." The method also includes providing at least one dielectric layer, and "providing a plurality of interconnect conductors formed at least one of through and within the at least one dielectric layer."

Nowhere does Rhee show or suggest a plurality of exposure cells that "expose separate areas of a surface to be exposed," as required by applicant's amended independent claim 77. Instead, Rhee merely describes the use of only one electron beam for exposing resist (see, e.g., Rhee, column 2, lines 64-66). Furthermore, nowhere does Rhee show or suggest providing at least one dielectric layer and "providing a plurality of interconnect conductors formed at least one of through and within the at least one dielectric layer," as required by applicant's amended independent claim 77.

Thus, for at least the above reasons, applicant's amended independent claim 77 is allowable over Rhee. Applicant respectfully requests, therefore, that the rejection under 35 U.S.C. § 102(b) of claim 77, and any claims dependent therefrom, including claims 78, 79, 81-83, and 92, be withdrawn.

The Rejections Based on 35 U.S.C. § 103

Claim 80

Claim 80 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Rhee in view of Eisenberger.

As applicant has pointed out above, amended independent claim 77 is patentable over Rhee. For at least the foregoing reasons, claim 80, which depends from claim 77, is patentable over Rhee in view of Eisenberger. As such, applicant respectfully requests that the rejection under 35 U.S.C. § 103(a) of claim 80 be withdrawn.

Claims 93, 98, and 104

Claims 93, 98, and 104 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Rhee in view of Greschner.

As applicant has pointed out above, amended independent claim 77 is patentable over Rhee. For at least the foregoing reasons, claims 93, 98, and 104, each of which depends from claim 77, is patentable over Rhee in view of Greschner. As such, applicant respectfully requests that the rejection under 35 U.S.C. § 103(a) of claims 93, 98, and 104 be withdrawn.

Claims 94 and 95

Claims 94 and 95 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Rhee in view of Greschner and further in view of Hori.

As applicant has pointed out above, amended independent claim 77 is patentable over Rhee. For at least the foregoing reasons, claims 94 and 95, each of which depends from claim 77, is patentable over Rhee in view of Greschner and Hori. As such, applicant respectfully requests that the rejection under 35 U.S.C. § 103(a) of claims 94 and 95 be withdrawn.

Claims 96 and 97

Claims 96 and 97 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Rhee in view of Greschner and further in view of Celler.

As applicant has pointed out above, amended independent claim 77 is patentable over Rhee. For at least the foregoing reasons, claims 96 and 97, each of which depends from claim 77, is patentable over Rhee in view of Greschner and Celler. As such, applicant respectfully requests that the rejection under 35 U.S.C. § 103(a) of claims 96 and 97 be withdrawn.

Claims 99-101, 103, and 105

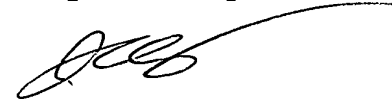
Claims 99-101, 103, and 105 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Rhee in view of Greschner and further in view of Murooka.

As applicant has pointed out above, amended independent claim 77 is patentable over Rhee. For at least the foregoing reasons, claims 99-101, 103, and 105, each of which depends from claim 77, is patentable over Rhee in view of Greschner and Murooka. As such, applicant respectfully requests that the rejection under 35 U.S.C. § 103(a) of claims 99-101, 103, and 105 be withdrawn.

Conclusion

The foregoing demonstrates that claims 77-120 are allowable. This application is therefore in condition for allowance. An early and favorable action is respectfully requested.

Respectfully submitted,



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